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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,403	04/07/2005	Mitsuhiro Yanari	XA-10297	4970
181 7590 05/31/2007 MILES & STOCKBRIDGE PC 1751 PINNACLE DRIVE SUITE 500 MCLEAN, VA 22102-3833			EXAMINER SCHWARTZ, JORDAN MARC	
			ART UNIT 2873	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,403	Applicant(s) YANARI, MITSUHIRO	
	Examiner Jordan M. Schwartz	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/05, 3/07</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 8 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claim is drawn to a computer program per se. A computer program per se is abstract instructions. Therefore, a computer program is not a physical thing (product) nor a process as they are not "acts" being performed. As such, this claim is not directed to one of the statutory categories of invention (SEE MPEP 2106.01) but is directed to nonstatutory functional descriptive material.

It is noted that computer programs embodied on a computer readable medium or other structure, which would permit the functionality of the program to be realized, would be directed to a product and be within a statutory category of invention, so long as the computer readable medium is not disclosed as non-statutory subject matter per se (signals or carrier waves).

Claim Rejections - 35 USC § 112

Claims 1, 5-6 and 8 (and dependent claims 2-4 and 7) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1 and 8, that part of the claims stating that the aberration is corrected "according to" or "in accordance with" the laws of Donder's-Listing renders

the claims vague and indefinite. Specifically, the laws of Donder's-Listing are directed to the rotation motion of the eyeball and not to "correcting aberration". Therefore claiming that the aberration is being corrected "according to" these laws renders the claims vague and indefinite. From what is set forth in the specification, applicant is apparently correcting aberration in consideration of the laws of Donder's-Listing and this is the assumed meaning for purposes of examination.

With respect to claims 5 and 6, claiming that "a surface" is being formed according to any one of claims 1-4 renders the claims vague and indefinite. Specifically, it is not proper to have a dependent claim depend from only portions of a previous claim. Claim 1, from which these claims depend is claiming a method for designing an ophthalmic lens and not just for designing one surface of such a lens. It is therefore not clear as to what is intended as limitations rendering the claims vague and indefinite. As a suggestion, in claim 5, applicant may want to claim "An ophthalmic lens manufacturing method designed in accordance with the ophthalmic lens design and design data obtained thereby according to any one of claims 1 through 4 which is characterized...whose shape is not formed beforehand is designed in accordance with said ophthalmic lens design method and the refractive surface whose shape is not formed beforehand is worked in accordance with said design data" with similar changes being made to claim 6 as appropriate.

Claim Objections

Claims 2-4 are objected to because of the following informalities: claims 2-4 each have two periods within the claims (one before the mathematical conditions and

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one after). Each claim is required to end in a single period in compliance with the MPEP. Appropriate correction is required.

Claim 8 is objected to because of the following informality: in line 1, "the refractive surface" lacks an antecedent basis and it is suggested that this portion of the claim be changed to "a refractive surface". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-7/₁ and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shirayanagi publication number 2002/0018178 in view of Yamakaji publication number 2005/0041205.

Shirayanagi discloses the limitations therein including the following: a method for designing ophthalmic lenses (abstract) comprising having one surface being either spherical or aspherical and being performed beforehand (paragraphs 0071-0072, 0075); a second surface having an aspherical shape (paragraphs 0072-0073); forming the aspherical surface shape such that aberrations are corrected (paragraph 0078); in accordance with the refractive power necessary for refractive correction and/or the refractive power necessary for astigmatic correction (paragraph 0070); the lens being attached to a shape working apparatus and the aspherical surface being worked on the basis of obtained design data (paragraphs 0070-0073); and the design data being

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determined at a different location from the location where the shape working apparatus is located and is transmitted by a communication device (paragraph 0070). Shirayanagi further discloses a computer program to determine the aspherical surface shape of an ophthalmic lens (abstract, paragraphs 0067-0070); calculating the refractive power for the refractive correction of the eye (paragraph 0072). Any direction for calculation can be considered as the "meridian direction" and the calculation will inherently be at some arbitrary angle. Shirayanagi further discloses calculating the refractive power of the lens for each arbitrary set of principal rays (paragraphs 0067-0072 and the embodiments); and the aspherical surface shape based on both the refractive correction of the eye and the refractive power of the lens (paragraphs 0067-0072 and the embodiments).

Shirayanagi discloses as is set forth above but does not specifically disclose the aberration being corrected in consideration of the laws of Donder's-Listing to minimize aberrations. Yamakaji'205 teaches that in formed spectacle lenses having an aspherical surface that corrects for aberrations, that the lens design should be in consideration of the laws of Donder's-Listing for the purpose of providing a spectacle lens of improved performance and for minimizing aberrations (abstract, paragraphs 0002-0016, 0036, 0061, 0093 and claim 2). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the aberration correcting aspherical surface of Shirayanagi as being formed in consideration of the laws of Donder's-Listing i.e. minimized in consideration of the laws of Donder's Listing since Yamakaji'205 teaches that in formed spectacle lenses having an aspherical surface that corrects for aberrations, that the lens design should take into account the laws of

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Donder's-Listing for the purpose of providing a spectacle lens of improved performance and aberration correction.

Allowable Subject Matter

Claims 2-4 and 5-7/₂₋₄ would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: none of the prior art either alone or in combination disclose or teach of the claimed combination of limitations to warrant a rejection under 35 USC 102 or 103. Specifically, with reference to claims 2-4 and 5-7/₂₋₄ none of the prior art either alone or in combination disclose or teach of the claimed method of designing an ophthalmic lens specifically including, as the distinguishing feature in combination with the other limitations, the claimed correcting of the aberration in consideration of the laws of Donder's-Listing and the shape of the surface whose shape is not formed beforehand is determined according to the specific mathematical conditions of claims 2-4.

Prior Art Citations

Kitani publication number 2005/0179861, Baudart et al patent number 6,382,789, and Qi patent number 6,012,813 are being cited herein to show teaching references that could have been used above (to teach the correcting of aberrations in consideration of the laws of Donder's Listing) instead of Yamakaji'205 however, such rejections would have been repetitive.

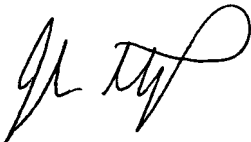
Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan M. Schwartz whose telephone number is (571) 272-2337. The examiner can normally be reached on Monday to Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jordan M. Schwartz
Primary Examiner
Art Unit 2873
May 3, 2007